

REMARKS

After entry of this Amendment, claims 1-6, 8-18, and 20-22 are pending in the application. This Amendment simplifies the issues on appeal by removing the rejection to claims 1, 4, 9, and 14 under 35 U.S.C. §112, first paragraph. Reconsideration of the application as amended is requested.

It is submitted that the last Office Action should not have been a Final Office Action, since the Examiner changed the grounds of rejection without permitting the Applicant an opportunity to respond to the new ground of rejection. If the Finality of the last Office Action was improper, the amendments to claims 1, 2, 4, 9, and 14 including the addition of the term "single piece" should have been entered as requested in the After Final Amendment previously filed. Applicant requests entry of these amendments to claims 1, 2, 4, 9, and 14 in the event that the Examiner withdraws the Finality of the last Office Action. Furthermore, the Examiner treated the terms "monolithic" and "single piece" as synonymous terms in the Final Office Action (see paragraphs 7 and 8 of the Office Action dated May 23, 2005), and therefore entry of the term "single piece" for the term "monolithic" would not require further search and/or consideration by the Examiner. Reconsideration and withdrawal of the Finality of the last Office Action is requested.

In the Office Action dated May 23, 2005, the Examiner objected to the disclosure of the specification, specifically paragraph [0033] line 3, where "10c" should be -10b-, and line 10, where "18a" should be -18e-. The paragraph [0033] has been corrected as suggested by the Examiner. Entry of the amendments to paragraph [0033] is requested.

The Examiner objected to the amendment to the specification under 35 U.S.C. 132, as introducing new matter into the disclosure of the invention. The Examiner specifically objected to the inclusion of the term "monolithic" previously added to the claims and to the specification paragraphs [0026] and [0027]. The term "monolith" is defined in Webster's New World Dictionary, Third College Edition, as "(1) a single large block or piece of stone, as in architecture or sculpture, (2) something made of a single block of stone, as an obelisk, (3) something like a monolith in size, unity of structure or purpose, unyielding quality - monolithic (adj.)...". A copy of the definition page is attached for the Examiner's review. The term as used in the specification is in reference to "unity of structure" or a "single piece" structure. However, to expedite prosecution on the merits, the term "monolithic" has been removed from paragraphs [0026] and [0027] of the

specification in this amendment. Entry of the amendments to paragraphs [0026] and [0027] is requested.

Claims 1, 4, 9, and 14 stand rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time that the application was filed, had possession of the claimed invention. In particular, the Examiner objects to the term “monolithic” with respect to the tube member 24 and the term “monolithic” with respect to the insert 16. It is submitted that claims 1, 4, 9, and 14 have been amended to remove the term “monolithic”. The configuration of the tube member 24 as a single piece can best be seen in Figure 9, while the configuration of the insert 16 as a single piece can best be seen in Figure 8. Since the configuration of the tube member 24 as a single piece and the configuration of the insert 16 as a single piece were shown in the original drawings as filed with the application, and since paragraphs [0026] and [0027] (as previously amended) incorporate this terminology (without objection by the Examiner) into the specification, it is submitted that this Amendment does not introduce any new subject matter into the application. Reconsideration of the Examiner’s rejection is requested.

Claims 4, 6, and 21 stand rejected under 35 U.S.C. §102(e) as being anticipated by Brennan et al. Brennan et al discloses a standard static mixer 16, where the static mixer shroud 20 contains mix elements 26 and a cone-shaped insert 12. (See column 2, lines 18-22) Claims 4, 6, 21 of the present application recite a hollow tubular housing having a first end and a second end for carrying viscous material therebetween, and a nozzle-retaining annular shoulder surface adjacent one end of the tubular housing, and a nozzle insert engagable with the nozzle-retaining annular shoulder surface within the tubular housing, where the nozzle insert has a non-linear axially extending inner surface defining a passage therethrough with an aperture of reduced dimension adjacent an outlet end for discharging a viscous material from the tubular housing through the nozzle insert. This specific structural configuration is not anticipated, taught or rendered obvious by Brennan et al. The Brennan et al reference does not anticipate, teach, or suggest a nozzle retaining annular shoulder surface adjacent one end of the tubular housing, and/or a nozzle insert engagable with the nozzle-retaining annular shoulder surface within the tubular housing. The Examiner refers to the nozzle-retaining annular shoulder surface (as receiving insert 12); however this is a conical surface (not an annular shoulder surface) formed at one end of the static mixer tube housing 16. See column 2, line 3 of Brennan et al. The cone-shaped insert 12 slides through the standard mixer tube

16 and rests against the conical surface formed adjacent the discharge end 18 of the tube 16. The static mixer tube 16 of Brennan et al does not have a nozzle-retaining annular shoulder for receiving an annular flange of a nozzle insert as recited in the claims of the present application. In fact, Brennan et al illustrates that the internal mixer element is received against the annular shoulder of Brennan et al, not the insert itself. This teaches away from the configuration as claimed in the present application. Therefore, Brennan et al does not anticipate, teach, or suggest a static mixer operably insertable within the hollow tubular housing for trapping an annular shoulder of the nozzle insert against the nozzle-retaining annular shoulder surface. The cone-shaped insert 12 of Brennan et al rests on the inner conical surface of the discharge end 18 of the static mixer tube 16. Claim 6 of the present invention recites the static mixer 14 is operably insertable within the hollow tubular housing 24 for trapping the annular flange 16b of the nozzle insert 16 against the nozzle-retaining annular shoulder surface 24d of the tubular housing 24. Brennan et al does not anticipate, teach, or suggest trapping the flange of the insert between the mixer element and the nozzle-retaining annular shoulder of the tubular housing as recited in claim 6. Brennan et al does not anticipate, teach, or suggest the nozzle insert being an interchangeable insert positionable within the second end of the tubular member against the nozzle-retaining annular shoulder surface of the static mixer tube as recited in claim 21 of the present application. Brennan et al only teaches that the cone-shaped insert 12 rests against the conical surface 18 formed in the discharge end of the static mixer tube 16. The static mixer tube 16 does not have a nozzle-retaining annular shoulder and the cone-shaped insert 12 does not have an annular flange to rest thereon. Since the cone-shaped insert 12 does not have an annular flange, the insert of Brennan et al cannot be trapped against an annular shoulder of the static mixer tube 16. In fact, Brennan et al teaches away from an annular flange on the insert 12 and teaches away from trapping the annular flange of the insert 12 between the nozzle-retaining annular shoulder surface of the tubular housing and the mixer elements as recited in claims 4, 6, and 21 of the present application. Therefore, reconsideration of the Examiner's rejection of claims 4, 6, and 21 as being anticipated by Brennan et al under 35 U.S.C. §102(e) is requested.

Claims 4-5, 8-10, 12-17, and 20-22 stand rejected under 35 U.S.C. §102(b) as being anticipated by Miller. This rejection is raised for the first time in the office action dated May 23, 2005. Since this rejection is applied to claims that have not been amended in the last amendment, the Examiner is requested to withdraw the finality of this office action and to issue a new non-final office action to

allow the applicant sufficient opportunity to address the new grounds of rejection raised for the first time in the last office action. Alternatively, the Examiner is requested to specifically cite the MPEP section relied on to permit withdrawal of a final rejection in order to change the ground of rejection from §102(b) to §102(e) for the Brennan et al reference, while also adding a new ground of rejection based on §102(b) applying the Miller reference, while issuing a final office action on claims that have not been amended. In any case, the Miller reference does not anticipate teach or suggest the invention as recited in claims 4-5, 8-10, 12-17, and 20-22. In particular, Miller states in column 4, line 44-51, that the dispensing needle assembly 40 includes a hollow cylindrical body 41 preferably formed of metal which is molded within the interior of an outer wing block connector 37 and has a hollow cylindrical dispensing tip 42 extending from the body 41, where the needle body 41 terminates in an outturned top end flange 43 which abuts against an end wall 44 of tapered male luer lock outlet nozzle 45. (Emphasis added). Claim 4 of the present application requires a tubular nozzle member and a nozzle insert engagable with a nozzle-retaining annular shoulder surface within the tubular housing, the nozzle insert having a nonlinear axially extending inner surface defining a passage therethrough with an aperture of reduced dimension adjacent the outlet. This specific structure is not anticipated, taught or suggested by the Miller reference, taken singularly or in any permissible combination. In particular, the tube 2 of Miller is not single piece, since it requires connector 37. The tube 2 of Miller does not include an inwardly extending annular shoulder and/or an inner conical nozzle surface for engagement with the nozzle insert as recited in claim 4. The dispensing needle assembly 40 of Miller is not a nozzle insert as required by claim 4. The dispensing needle assembly 40 of Miller does not have an outwardly extending flange engagable with the inwardly extending shoulder of the tubular member as recited in claim 4. The dispensing nozzle assembly 40 of Miller does not have a conical external surface extending toward a second end as recited in claim 4. Claim 5 recites that the insert has a cylindrical passage portion adjacent the second aperture. The Miller reference does not disclose a insert with the claimed configuration. Claims 8 and 20 recite that the insert has an inner surface with an beveled-angular cut adjacent a first end and a cylindrical surface portion extending longitudinally at least partially between the first end and a second end of the insert. Claim 9 recites hollow tubular housing having a first end and a second end for carrying viscous material therebetween, and a nozzle-retaining annular shoulder surface extending radially inwardly adjacent one end of the tubular housing, and a nozzle insert having a radially outwardly extending

annular flange adjacent a first end, the radially outwardly extending annular flange engagable with the nozzle-retaining annular shoulder surface within the tubular housing, the nozzle insert for discharging a viscous material from the tubular housing through the nozzle insert. This specific structural configuration is not anticipated, taught, or rendered obvious by the Miller reference. The Miller reference does not anticipate, teach or suggest an annular shoulder extending radially inwardly adjacent on end of the hollow tubular housing, and/or a radially outwardly extending annular flange adjacent a first end of the nozzle insert engagable with the annular shoulder. Claim 10 recites that the insert has a cylindrical passage portion extending longitudinally adjacent the second aperture of the insert. The Miller reference does not disclose an insert with the claimed configuration. Claim 12 recites that the insert extends beyond the one end of the tubular housing. The Miller reference does not disclose an insert meeting the limitations of the claimed configuration. Claim 14 recites a tubular member having first and second ends, the second end having an internal insert-retaining annular shoulder surface, and an axially extending portion of the tubular member interconnecting said first and second ends, and a nozzle insert engageable within the second end of the tubular member and having an outwardly extending annular flange engageable with the annular shoulder within the tubular member, the nozzle insert extending outwardly beyond the second end of the tubular member for discharging viscous material. This specific structural configuration is not anticipated, taught, or rendered obvious by the Miller reference. The Miller reference does not anticipate, teach or suggest the tubular member having an internal insert-retaining annular shoulder surface, and/or a outwardly extending annular flange of the nozzle insert engagable with the annular shoulder. Claim 15 of the present application recites that the nozzle insert includes an interchangeable tip portion insertable into the end of the tubular nozzle member and against the internal insert-retaining surface. The Miller reference does not anticipate, teach, or suggest a nozzle insert including an interchangeable tip portion insertable into the tubular nozzle member for reasons given in more detail above. The Miller reference teaches in Column 4, lines 44-48, that dispensing needle assembly 40 includes a cylindrical body 41, and a hollow cylindrical dispensing tip 42 extending from the body 41. Claim 16 recites that the insert has an entry point of the passage with an angular surface in communication with a cylindrical surface extending along at least a portion of the passage. The dispensing tip 42 of the multi-part dispensing nozzle assembly 40 of Miller is not interchangeable as recited in claims 21-22. Reconsideration of the Examiner's rejection of claims 4-5, 8-10, 12-17, and 20-22 is requested.

Claims 1-6, 8-18, and 20-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Brennan et al, Miller and Keller et al. The Brennan et al, Miller, and Keller et al references, taken singularly or in any permissible combination, do not anticipate, teach, or suggest the present invention as recited in claims 1-6, 8-18, and 20-22. Brennan et al. discloses a standard static mixer tube 16, where the static mixer shroud 20 contains mix elements 26 and a cone shaped insert 12. (See column 2, lines 18-22) Claim 1 of the present application recites a tubular nozzle member having one end for receiving viscous material for passage through the nozzle member, a nozzle tip portion having an inwardly extending annular shoulder with an inner conical nozzle surface extending from the annular shoulder toward an opposite end of the nozzle member, and an axially extending main body tubular portion interconnecting the one end and the nozzle tip portion, the tubular nozzle member having an external surface with radially inwardly stepped reductions in dimension approaching an end of the nozzle tip portion providing guides for selectively cutting variable discharge opening sizes, and a nozzle insert having an outwardly extending flange adjacent a first end and a conical external surface extending toward a second end, where the annular flange of the nozzle insert is engageable against the annular shoulder of the tubular nozzle member within the tubular nozzle member proximate the nozzle tip portion of the nozzle member and operative for discharging viscous material. This specific structural configuration is not anticipated, taught or rendered obvious by Brennan et al, and/or Miller and/or Keller et al, taken singularly or in any permissible combination. The addition of the Keller et al reference to Brennan et al and/or Miller does not overcome the deficiencies of the Brennan et al reference previously described above in detail. In particular, the Keller et al reference teaches an externally stepped housing, but does not teach a nozzle insert with an outwardly extending flange engagable with an inwardly extending shoulder of the tubular nozzle member as recited in claims 1-6, 8-18, and 20-22.

The Miller reference can not be properly combined with either the Brennan et al. reference and/or the Keller et al. reference, since to do so would destroy the teaching of the multi-part housing inherent in the Miller disclosure. Miller states in column 4, line 44-51, that the dispensing needle assembly 40 includes a hollow cylindrical body 41 preferably formed of metal which is molded within the interior of an outer wing block connector 37 and has a hollow cylindrical dispensing tip 42 extending from the body 41, where the needle body 41 terminates in an outturned top end flange 43 which abuts against an end wall 44 of tapered male luer

lock outlet nozzle 45. (Emphasis added). In the configuration illustrated by Miller, the mixer element 48 is spaced from the top end flange 43 by end wall 44 of nozzle 45. Therefore, the Miller reference does not teach or suggest trapping the flange 43 of an insert (or an insert assembly) against the nozzle-retaining annular shoulder surface with the mixer element as recited in claims 6, 11, and 18 of the present application. The proposed combination would contradict the teaching of Keller et al. that a nozzle insert is not needed, and/or would contradict the teaching of Brennan et al. that a flange was not needed on the nozzle insert.

Claim 4 of the present application requires a tubular nozzle member and a nozzle insert engagable with a nozzle-retaining annular shoulder surface within the tubular housing, the nozzle insert having a nonlinear axially extending inner surface defining a passage therethrough with an aperture of reduced dimension adjacent the outlet. This specific structure is not anticipated, taught or suggested by the Brennan et al reference, the Keller et al reference, and/or the Miller reference, taken singularly or in any permissible combination. In particular, the tube 2 of Miller is not single piece, since it requires connector 37. The tube 2 of Miller does not include an inwardly extending annular shoulder and/or an inner conical nozzle surface for engagement with the nozzle insert as recited in claim 4. The dispensing needle assembly 40 of Miller is not a single piece nozzle insert. The dispensing needle assembly 40 of Miller does not have an outwardly extending flange engagable with the inwardly extending shoulder of the tubular member as recited in claim 4. The dispensing nozzle assembly 40 of Miller does not have a conical external surface extending toward a second end as recited in claim 4.

The Miller reference can not be properly combined with the Keller et al. and/or the Brennan et al. references without destroying the teaching of a multi-part tube inherent in the Miller reference, and/or without destroying the inherent teaching of Keller et al that no insert is required, and/or without destroying the inherent teaching of Brennan et al that the insert does not require an annular flange and the inherent teaching of Brennan et al that the insert is not trapped between the nozzle-retaining annular shoulder surface and the mixer element as recited in the claims of the present application.

The addition of the Miller reference to the combination of Brennan et al in view of Keller et al does not anticipate, teach or suggest a static mixer trapping the nozzle insert against the nozzle-retaining annular shoulder surface as recited in claims 6, 11 and 18, since Miller teaches that the end wall 44 of the tapered male luer locking nozzle is interposed between the flange 43 and the outlet end 50 of the

mixing element 48. (See Fig. 4 of Miller and column 4, lines 48-51 and column 5, lines 2-5).

The dispensing tip 42 of the multi-part dispensing nozzle assembly 40 of Miller is not interchangeable as recited in claims 2, 15, and 21-22. Claim 2 recites that the nozzle insert includes an interchangeable tip portion insertable into the end of the tubular nozzle member. The Brennan et al. reference does not anticipate, teach or suggest an interchangeable tip portion and/or the tip portion extending beyond the end of the tubular nozzle member. The addition of the Keller et al. reference does not overcome this deficiency. The Keller et al. reference does not anticipate teach or suggest an interchangeable tip portion insertable into the end of the tubular nozzle member. The addition of the Miller reference does not overcome the deficiency of the combination of Brennan et al. and/or Keller et al. The Miller reference does not anticipate, teach or suggest a nozzle insert including an interchangeable tip portion insertable into the end of the tubular nozzle member for the reasons given in detail above. Furthermore, the Miller reference can not be properly combined with the Brennan et al. and/or the Keller et al. references, since the Miller reference teaches away from the requirement of a single piece tubular nozzle member and there would be no motivation for those skilled in the art to combine the references in the manner asserted by the Examiner. In addition, the proposed combination can not be properly made, since the combination would destroy the teaching of a multi-part tubular nozzle member inherent to the disclosure of the Miller reference, and/or the inherent teaching that inserts are not required in Keller et al, and/or the inherent teaching that inserts do not require an annular flange to be trapped between nozzle-retaining annular shoulder surfaces and the mixer elements as taught by the cone-shaped inserts of Brennan et al.

The Brennan et al reference does not disclose a nozzle insert having an outwardly extending annular flange engagable against a nozzle-retaining annular shoulder of the tubular housing, and/or a static mixer operably insertable within the hollow tubular housing for trapping the annular shoulder of the nozzle insert against the nozzle-retaining annular shoulder surface of the tubular housing. The Examiner states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Keller et al to associate stepped reductions with the Brennan tube member, and to further combine Miller to associate a flange with the Brennan et al insert in order to facilitate securement. The addition of the Keller et al reference to the Brennan et al reference does not overcome the deficiencies of Brennan et al as discussed in detail above. The Miller reference discloses a tube

member 2 including a tip insert 40 having a flange 43. However, the insert of Miller is a multi-piece dispensing needle assembly 40 including a hollow cylindrical body 41, a hollow cylindrical dispensing tip 42, and locking connector 37. There is no motivation for combining the multi-piece assembly of Miller with a one-piece insert of Brennan et al. The multi-piece insert assembly of Miller would not slidably fit within the static mixer tube of Brennan et al. The combination of references does not anticipate, teach, or suggest the nozzle insert having an annular flange as recited in the claims of the present invention. The Miller reference cannot be properly combined with either the Brennan et al, reference and/or the Keller et al, reference since to do so would destroy the teaching of the multi-part housing inherent in the Miller disclosure. The combination of Brennan et al, Keller et al, and/or Miller does not anticipate, teach, or suggest a nozzle insert that extends beyond the end of the nozzle tip portion of the tubular nozzle member. Miller discloses a multi-piece nozzle insert, and also discloses a multi-piece tube. The mixer tube 2 of Miller requires the attachment of locking connector 37 formed with a tapered upward interior 47 to be assembled together for the mixer to function according to the disclosure.

Claim 2 of the present application recites that the nozzle insert includes an interchangeable tip portion insertable into the end of the tubular nozzle member and extends beyond an end of the nozzle tip portion of the tubular member. The Brennan et al, reference does not anticipate, teach, or suggest an interchangeable tip and/or the tip portion extending beyond an end of the tubular nozzle member. The addition of the Keller et al, reference does not overcome this deficiency. The Keller et al, reference does not anticipate, teach, or suggest an interchangeable tip insertable into the end of the tubular nozzle member. In addition, the Miller reference does not overcome the deficiency of Brennan et al, and Keller et al. The Miller reference does not anticipate, teach, or suggest a single piece nozzle insert including an interchangeable tip portion insertable into the tubular nozzle member for reasons given in more detail above. Furthermore, the Miller reference cannot be properly combined with Brennan et al, and/or the Keller et al, references since the Miller reference teaches away from the requirement of a single piece tubular nozzle member and there would be no motivation for those skilled in the art to combine the references in this way. In addition, the proposed combination cannot be properly made, since the combination would destroy the multi-part tubular nozzle member inherent in the disclosure in the Miller reference. Even if, as suggested by the Examiner, the Brennan et al reference discloses a “single piece” insert, the Miller

reference fails to teach an annular flange on a single piece insert and having a conical surface as recited in the present claims. The Miller reference teaches in Column 4, lines 44-48, that dispensing needle assembly 40 includes a cylindrical body 41, and a hollow cylindrical dispensing tip 42 extending from the body 41.

Claim 3 recites that the single piece insert has an inner surface entry point with an angular cut funnel shaped surface portion and a cylindrical surface portion. The Brennan et al reference does not anticipate, teach or suggest this specific structural configuration, since it only discloses a conical inner surface. The addition of Keller et al does not overcome this deficiency, since Keller does not disclose the use of any insert. The further addition of Miller does not overcome the deficiency of the combination of Brennan et al and/or Keller et al, since Miller does not disclose an insert with the claimed configuration. There is no teaching or suggestion of combining the references as suggest by the Examiner, except for the disclosure of the present invention itself.

Claim 5 recites that the insert has a cylindrical passage portion adjacent the second aperture. The Brennan et al reference does not anticipate, teach or suggest this specific structural configuration, since it only discloses a conical inner surface. The addition of Keller et al does not overcome this deficiency, since Keller does not disclose the use of any insert. The further addition of Miller does not overcome the deficiency of the combination of Brennan et al and/or Keller et al, since Miller does not disclose an insert with the claimed configuration. There is no teaching or suggestion of combining the references as suggest by the Examiner, except for the disclosure of the present invention itself.

Claims 8, 13 and 20 recite that the insert has an inner surface with an beveled-angular cut adjacent a first end and a cylindrical surface portion extending longitudinally at least partially between the first end and a second end of the insert. The Brennan et al reference does not anticipate, teach or suggest this specific structural configuration, since it only discloses a conical inner surface. The addition of Keller et al does not overcome this deficiency, since Keller does not disclose the use of any insert. The further addition of Miller does not overcome the deficiency of the combination of Brennan et al and/or Keller et al, since Miller does not disclose an insert with claimed configuration. There is no teaching or suggestion of combining the references as suggest by the Examiner, except for the disclosure of the present invention itself.

Claim 10 recites that the insert has a cylindrical passage portion extending longitudinally adjacent the second aperture of the insert. The Brennan et al

reference does not anticipate, teach or suggest this specific structural configuration, since it only discloses a conical inner surface. The addition of Keller et al does not overcome this deficiency, since Keller does not disclose the use of any insert. The further addition of Miller does not overcome the deficiency of the combination of Brennan et al and/or Keller et al, since Miller does not disclose an insert with claimed configuration. There is no teaching or suggestion of combining the references as suggest by the Examiner, except for the disclosure of the present invention itself.

Claims 12 and 14 recite that the insert extends beyond the one end of the tubular housing. The Brennan et al reference does not anticipate, teach or suggest this specific structural configuration, since it only discloses a cone-shaped within the end of the static mixer tube. The addition of Keller et al does not overcome this deficiency, since Keller does not disclose the use of any insert. The further addition of Miller does not overcome the deficiency of the combination of Brennan et al and/or Keller et al, since Miller does not disclose an insert meeting the limitations of the claimed configuration. There is no teaching or suggestion of combining the references as suggest by the Examiner, except for the disclosure of the present invention itself.

Claim 16 recites that the insert has an entry point of the passage with an angular surface in communication with a cylindrical surface extending along at least a portion of the passage. The Brennan et al reference does not anticipate, teach or suggest this specific structural configuration, since it only discloses a conical inner surface. The addition of Keller et al does not overcome this deficiency, since Keller does not disclose the use of any insert. The further addition of Miller does not overcome the deficiency of the combination of Brennan et al and/or Keller et al, since Miller does not disclose an insert meeting the limitations of the claimed configuration. There is no teaching or suggestion of combining the references as suggest by the Examiner, except for the disclosure of the present invention itself.

The amendment does not raise any new issues requiring further consideration and/or search. The amendment does not raise the issue of new matter, since these recitations are shown in Figures 8 and 9 as originally filed.. The amendment places the application in better form for appeal by materially reducing or simplifying the issues for appeal. The amendment does not present additional claims without cancelling a corresponding number of finally rejected claims. This amendment could not have been earlier presented, since the Examiner had not previously objected to the terms being rejected under 35 U.S.C. §112, first paragraph,

so this is Applicant's attorney's first opportunity to address the Examiner's rejection based on this rejection.

It is respectfully submitted that this Amendment traverses and overcomes all of the Examiner's objections and rejections to the application as originally filed. It is further submitted that this Amendment has antecedent basis in the application as originally filed, including the specification, claims and drawings, and that this Amendment does not add any new subject matter to the application. Reconsideration of the application as amended is requested. It is respectfully submitted that this Amendment places the application in suitable condition for allowance; notice of which is requested.

Respectfully submitted,
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shades of one color — **mono-chro'mic adj.** — **mono-chro'mist n.**
mono-cle (män'ə käl) *n.* [Fr < LL *monoculus*, one-eyed] Gr *monos*, single (see MONO-) + L *oculus*, eye] an eyeglass for one eye only — **mono-cled adj.**

mono-clin-al (män'ə klin'äl, män'ə-) *adj.* Geol. 1 dipping in one direction: said of strata, or rock layers 2 of strata dipping in the same direction — *n.* MONOCLINE

mono-cline (män'ə klin', män'ə-) *n.* [*< MONO-* + Gr *klinein*, to incline: see LEAN¹] a monoclinal rock fold or structure

mono-clin-ite (män'ə klin'it, män'ə-) *adj.* [*see prec. & -ite*] designating or of a system of crystallization characterized by three axes of unequal length, two of which intersect obliquely and are perpendicular to the third

mono-cli-nous (-klī'nüs) *adj.* [ModL *monoclinus* < MONO- + Gr *klinē*, a bed, couch: see CLINIC] having stamens and pistils in the same flower

mono-clon-al (-klōn'äl) *adj.* [*MONO-* + CLONAL] of cells derived or cloned from one cell

mono-clonal antibody Immunology an antibody produced by a hybridoma for a specific antigen

mono-coque (män'ə käk', -kük') *adj.* [Fr < *mono-*, MONO- + *coque*, a shell < L *coccus*, scarlet berry < Gr *kokkos*, a seed] 1 designating or of a kind of construction, as of a rocket, in which the skin or outer shell bears all or most of the stresses 2 designating or of a kind of construction, as of a racing car in which the body and chassis are one unit

mono-coty-le-don (män'ə kät'ë lë'dən, män'ə-) *n.* Bot. any of a class (Liliopsida) of angiosperms having an embryo containing only one cotyledon, and usually having parallel-veined leaves, flower parts in multiples of three, and no secondary growth in stems and roots, as lilies, orchids, and grasses; often clipped to **mono-cot** — **mono-cot-y-le-don-ous adj.**

mono-cracy (mō näk'rä së, mä-) *n.* pl. -cies [*MONO-* + CRACY] government by one person; autocracy — ***mono-crat** (män'ə krä't) *n.* — **mono-crat'ic adj.**

mono-cular (mō näk'yü lär, -yä-) *adj.* [*< LL* *monóculus* (see MONO-CLE) + -AR] 1 having only one eye 2 of, or for use by, only one eye — *n.* a field glass or telescopic device with a single eyepiece

mono-cul-ture (män'ə kül'chür, män'ə-) *n.* [*MONO-* + CULTURE] the raising of only one crop or product without using the land for other purposes

mono-cy-cle (-sik'lë) *n.* UNICYCLE

mono-cy-clic (män'ə sik'lïk) *adj.* 1 of or forming one cycle, circle, whorl, etc. 2 Chem. containing one ring of atoms in the molecule

mono-ctye (män'ə sit', män'ə-) *n.* [*MONO-* + -CYTE] a large, mononuclear, nongranular white blood cell with a round or kidney-shaped nucleus — **mono-cyt'ic** (-sit'ik) *adj.*

Mo-nod (mō nöd'), Jacques Lucien (zhäk lü syän') 1910-76; Fr. biochemist

mono-dist (män'ə dist) *n.* a writer or singer of a monody

mono-drama (män'ə drä'mä, -dräm', män'ə-) *n.* drama acted, or written to be acted, by only one performer — **mono-dra-mat'ic** (-dräm'itik) *adj.*

mono-dy (män'ə dë) *n.* pl. -dies [*LL* *monodia* < Gr *monoidia* < *monoidos*, singing alone < *monos*, alone (see MONO-) + *aidein*, to sing: see ONE] 1 in ancient Greek literature, an ode sung by a single voice, as in a tragedy; lyric solo, generally a lament or dirge 2 a poem in which the poet mourns someone's death 3 a monotonous sound or tone, as of waves 4 Music a) an early vocal style having a single voice part with continuous accompaniment, as in Baroque opera b) a composition in this style 5 MONOHARMONY — **mono-dic** (mō näd'ik, mä-) or **mono-nod'i-cal** *adj.* — **mono-nod'i-cally** *adv.*

mono-no-cious (mō né'shas, mä-) *adj.* [*< MON-* + Gr *oikos*, a house (see ECO-) + -IOUS] 1 Bot. having separate male flowers and female flowers on the same plant, as in corn 2 Zool. having both male and female reproductive organs in the same individual; hermaphroditic — **mono-no-cism** (-siz'm) *n.*

mono-fila-ment (män'ə fil'ə mänt, män'ə-) *n.* a single untwisted strand of synthetic material. Also **mono-fil'**

mono-ga-my (mō näg'ə mē', mä-) *n.* [Fr *monogamie* < LL (Ec) *monogamia* < Gr: see MONO- & GAMY] 1 the practice or state of being married to only one person at a time 2 [Rare] the practice of marrying only once during life 3 Zool. the practice of having only one mate — **mono-ga-mist** *n.* — **mono-ga'mous** or **mono-gamic** (män'ə gam'ik) *adj.*

mono-gen-e-sis (män'ə jen'ë sis, män'ə-) *n.* [ModL: see MONO- & GENESIS] Biol. 1 the hypothetical descent of all living organisms from a single original organism or cell 2 asexual reproduction, as by budding or spore formation

mono-ge-net-ic (-ji net'ik) *adj.* 1 of or pertaining to monogenesis 2 designating or of animals without alternating asexual and sexual generations

mono-gen-ic (-jen'ik) *adj.* 1 [*MONO-* + GEN(E) + -IC] Biol. designating or of a mode of inheritance in which a character is controlled by one pair of genes 2 [*MONO-* + -GEN + -IC] Zool. producing offspring of one sex only, as females only in some species of aphids — **mono-gén-ey** (mō näj'ə né) *n.*

mono-nog-enism (mō näj'ə niz'äm, mä-) *n.* [*MONO-* + -GEN + -ISM] theory that all human beings are descended from a single pair of ancestors: see POLYGENISM

mono-glot (män'ə glöt', män'ə-) *adj.* [Gr *monoglottos*: see MONO- & (POLY)GLOT] speaking or writing only one language — *n.* a monoglot person

mono-gram (män'ə gram') *n.* [*LL* *monogramma* < Gr *mono-*, MÖNÖ- + *gramma*, letter: see GRAM¹] a character or figure made up of two or

more letters, often initials of a name, combined in a single design: used on writing paper, ornaments, clothing, etc. — *vt.* **grammed**, **gramming** to put a monogram on — **mono-gram-mat'ic** (-gräm'at'ik) *adj.*

mono-graph (män'ə graf) *n.* [*MONO-* + -GRAPH] 1 orig., a treatise on a single genus, species, etc. of plant or animal 2 a book or long article, esp. a scholarly one, on a single subject or a limited aspect of a subject — **mono-graph'ic adj.**

mono-gly-nous (mō näj'ə nüs, mä-) *adj.* 1 of or characterized by monogyny 2 Bot. having one style or pistil

mono-gly-ny (-né) *n.* [*MONO-* + -GYNY] the practice or state of being married to only one woman at a time

mono-hy-drate (män'ə hí'drä't) *n.* a hydrate containing one molecule of water per molecule of combining compound

mono-hy-dric (-hi drïk') *adj.* [*MONO-* + HYDRIC] 1 MONOHYDROXY 2 [Rare] having one atom of replaceable hydrogen

mono-hy-drox-y (-hi drïk'së) *adj.* [*MONO-* + HYDROXY] having one hydroxyl group in the molecule

mono-layer (män'ə lä'er) *n.* a layer or film one molecule thick

mono-ling-u-al (män'ə lin'gwäl, män'ə-) *adj.* [*MONO-* + LINGUAL] 1 of or in one language 2 using or knowing only one language

mono-lith (män'ə lith') *n.* [Fr *monolith* < L *monolithus* < Gr *monolithos*, made of one stone < *monos*, single (see MONO-) + *lithos*, stone] 1 a single large block or piece of stone, as in architecture or sculpture 2 something made of a single block of stone, as an obelisk 3 something like a monolith in size, unity of structure or purpose, unyielding quality — **mono-lith'ic adj.** — **mono-lith'ism n.**

mono-logue or **mono-log** (män'ə lög') *n.* [Fr < Gr *monologos*, speaking alone < *monos*, single (see MONO-) + *leguin*, to speak (see LOGIC)] 1 a long speech by one speaker, esp. one monopolizing the conversation 2 a passage or composition, in verse or prose, presenting the words or thoughts of a single character, 3 a part of a play in which one character speaks alone; soliloquy 4 a play, skit, or recitation for one actor only — **mono-logue'ist** or **mono-log'ist** (mä nä'lə jïst) *n.*

mono-ma-nia (män'ə mä'né a) *n.* [ModL: see MONO- & MANIA] 1 an excessive interest in or enthusiasm for some one thing; craze 2 a mental disorder characterized by irrational preoccupation with one subject — **mono-ma-niac** (-mä'né ak') *n.* — **mono-ma-ni-a-cal** (-nä'ñé kal) *adj.*

mono-mer (män'ə mär) *n.* [*MONO-* + Gr *meros*, a part: see MERIT] a simple molecule that can form polymers by combining with identical or similar molecules — **mono-mer'ic** (-mer'ik) *adj.*

mono-nom-er-ous (mō näm'ər ös, mä-) *adj.* [ModL *monomerus* < Gr *monomerés*, single (see MONO-, MONO- + *meros*, a part: see MERIT) + -OUS] having one member; as a fruit of one carpel

mono-metal'ic (män'ə me'täl'ik, män'ə-) *adj.* 1 of or using one metal 2 of or based on monometallism

mono-metal-ism (-met'l izm') *n.* 1 the use of only one metal, usually gold or silver, as the monetary standard 2 the doctrine or policies supporting this — **mono-metal-list** *n.*

mono-no-mial (mō nō'mé al, mä-) *adj.* [*MONO-* + (BI)NOMIAL] 1 Algebra consisting of only one term 2 Biol. consisting of only one word: said of a taxonomic name — *n.* a monomial expression, quantity, or name

mono-no-mec-u-lar (män'ə mō lek'yü lar) *adj.* 1 of a single molecule 2 designating or of a layer-one molecule thick

mono-mor-phic (män'ə mör'fik) *adj.* [*MONO-* + -MORPHIC] 1 having only one form 2 having the same or an essentially similar type of structure Also **mono-mor'phous** (-föös)

Mo-non-ga-he-la (ma näng'ə hé'lä, -näñ'-) [*< Algonquian*] river in N W. Va. & SW Pa., flowing north to join the Allegheny at Pittsburgh & form the Ohio: 128 mi. (206 km.)

mono-nu-clear (män'ə nü'klear, -nük'lär) *adj.* 1 Bot. having one nucleus in a cell 2 Chem. MONOCYCLIC (sense 2)

mono-nu-cle-o-sis (män'ə nü'klee'ō sis, -nük'lō-) *n.* [*MONO-* + NUCLE(US) + -OSIS] 1 INFECTIOUS MONONUCLEOSIS 2 the presence in the blood of an excessive number of cells having a single nucleus

mono-nu-phagous (mō næf'ə gas, mä-) *adj.* [*MONO-* + -PHAGOUS] feeding on only one kind of food, as on a certain plant

mono-pho-bia (män'ə fō'bë ä, män'ə-) *n.* [ModL: see MONO- & -PHOBIA] an abnormal fear of being alone

mono-phon'ic (män'ə fän'ik, män'ə-) *adj.* 1 of, or having the nature of, monophony 2 designating or of sound reproduction using a single channel to carry and reproduce sounds through one or more loudspeakers

mono-pho-ny (mō näf'ə né, mä-) *n.* [*MONO-* + -PHONY] 1 music having a single melody without accompaniment or harmonizing parts, as in plainsong 2 MONODY

mono-ph-thong (män'əf thöng') *n.* [*< Gr* *monophtongos*, of or with one sound, < *monos*, single (see MONO-) + *phthongos*, a sound, voice] a simple vowel sound during the utterance of which the vocal organs remain in a relatively unchanging position, as (ä), (oo), or (i) — **mono-ph-thong'al** (-thöng'äl, thöng'gäl) *adj.*

mono-ph-yletic (män'əf il'ëtik, män'ə-) *adj.* [*see prec.* & PHYLETIC] 1 of a single stock 2 developed from a single ancestral type — **mono-phylet'ism** (-fël'ëtiz'm) *n.*

mono-phyl-lous (män'ə fil'ës) *adj.* [*Gr* *monophyllos* < *monos*, single (see MONO-) + *phyllon*, leaf (see BLOOM¹)] Bot. 1 having or consisting of only one leaf 2 having united sepals or petals

Mo-nophy-site (mō näf'ə sit', mä-) *n.* [LGR(Ec) *monophytes* < Gr *monos*, single (see MONO-) + *phytis*, nature (see PHYSIC)] an adherent of an orig. 4th- and 5th-cent. theory asserting the existence of only one nature (divine or divine-human) in Christ and opposing the orthodox doctrine of the existence of two distinct natures (one wholly divine, the other wholly human) in the one person of Christ — **Mo-nophy-sit'ic** (-sit'ik, män'ə fë-) *adj.*